

LIEBHERR

CONSTRUCTION EQUIPMENT



[(362424)] LIEBHERR L556 065472-1826 - Diesel Engine

Sample No: LH

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

Sample Number	LH	LH0250777	LH0239119	LH0226823
Sample Date	20 Dec 2023	10 Mar 2023	15 Aug 2022	10 May 2022
Machine Hours	5792	3355	1598	1105
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

BOIS LIB INC.
 275 RUE JEREMIE-PACAUD
 PRINCEVILLE, QC
 CA G6L 0A1
 Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	11.3	12.6	13.6	12.0
Oxidation (PA)	%	57	87	64	93

T:
F:



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	48	83	62	86
Sulfation (PA)	%	50	67	53	67
Glycol	%	NEG	NEG	NEG	0.0
Fuel	%	1	<1.0	<1.0	<1.0
Silicon	ppm	6	8	6	8
Sodium	ppm	<1	2	2	4
Potassium	ppm	<1	0	<1	<1

Diagnosis

The oil is near the end of its useful service life, recommend schedule an oil change. No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. Manganese ppm levels are abnormally low. Visc @ 100°C is abnormally low. Viscosity of sample indicates oil is within SAE 30 range, advise investigate.



WEAR METALS

Iron	ppm	3	13	4	6
Copper	ppm	2	22	77	423
Lead	ppm	<1	1	2	13
Tin	ppm	0	1	<1	<1
Aluminum	ppm	1	2	1	1
Chromium	ppm	0	<1	0	<1
Molybdenum	ppm	59	60	58	59
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1030	1196	1078	867
Magnesium	ppm	974	992	1006	1172
Zinc	ppm	1173	1238	1226	1235
Phosphorus	ppm	1038	1045	1052	1076
Barium	ppm	0	<1	<1	2
Boron	ppm	2	1	3	37

Depot: LIBPRI
 Unique No: 5697690
 Signed: Kevin Marson
 Report Date: 22 Dec 2023



GRAPHS

